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STAAS & HALSEY LLP
SUITE 700
1201 NEW YORK AVENUE, N.W.
WASHINGTON, DC 20005

EXAMINER	
MORRISON, THOMAS A	
ART UNIT	**PAPER NUMBER**
3653	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/649,728	LEE ET AL.	
	Examiner	Art Unit	
	Thomas A. Morrison	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 February 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) *11,24-26 and 34* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-10, 12-23, 27-33 and 35-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *01/13/2005*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of (1) claims 1-23 and 27-35 of Group I and (2) Species I (Figs. 2-5), in the reply filed on February 28, 2005 is acknowledged. The traversal is on the ground(s) that (1) the non-elected process claims are so closely related to the elected apparatus claims that they should remain in the same application; (2) there have been no references cited to show any necessity for requiring restriction; and (3) evaluation of all claims would not provide an undue burden upon the examiner. This is not found persuasive because, as outlined in the November 10, 2004 restriction requirement, the process claims and the apparatus claims are classified in different subclasses. In other words, the non-elected process claims are not closely related to the elected apparatus claims. Moreover, there is no requirement for the examiner to cite references to show that the restriction is proper. The examiner already explained the different classifications of the process and apparatus claims and explained that the process can be practiced by another materially different apparatus, and also the apparatus as claimed can be used to practice another and materially different process. In summary, it would place a substantial burden upon the examiner to search for both the apparatus claims and the method claims, since the searches for such groups of claims are not necessarily the same.

The requirement is still deemed proper and is therefore made FINAL.

It is also noted that applicant states that insofar as Species II (Figures 6-9) of Group I is concerned, it is believed that newly added linking claim 36 links together Species I (Figures 2-5) and Species II (Figures 6-9), and, therefore, acts to prevent restriction between inventions that may otherwise be shown to be divisible. While claim 36 may possibly be generic to Species I and Species II, the two species can still be properly restricted as patentably distinct species. Later, it is possible that some claims may be rejoined in this case, if at least one claim is found to be allowable and generic to Species I and Species II. Finally, it is noted that applicant elected claims 1-23 and 27-35 and Species I (Figures 2-5). However, applicant did not identify which of claims 1-23 and 27-35 are readable on Species I. Species I (Figs. 2-5) does not include a rack member and a pinion member, as recited in claims 11 and 34. This feature is a feature specific to the embodiment of drawing figures 6-9 (Species II). Accordingly, claims 11 and 34 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as drawn to a nonelected species. In summary, claims 1-10, 12-23, 27-33 and 35-36 have been examined.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-10, 12-23, 27-33 and 35-36 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the paper sheet" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Also, it is unclear in claim 1 as to how many topmost papers are claimed. Line 5 of claim 1 recites "a topmost paper" and then line 6 of claim 1 recites "a topmost paper". Are these the same thing or different?

Moreover, it is unclear what is meant in claim 1 by the recited "a pick-up position varying unit to move the pick-up roller to one position among at least two pick-up positions which are **pre-set in accordance with the paper characteristics**". (emphasis added).

Regarding claim 2, it is unclear what is meant by the recited "a paper of strength" and "a paper of low strength".

Regarding claim 4, it is unclear how many first ends each first link members has, and how many first ends each second link members has. Does each of the first and second link members have one first end?

Claim 4 recites the limitation "the second end" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim 5 recites the limitation "the second end" in line 5. There is insufficient antecedent basis for this limitation in the claim. Also, claim 5 recites the limitation "the second end" in line 9. There is insufficient antecedent basis for this limitation in the claim.

Also, it is unclear where the third link is located in claim 5. Claim 5 recites that the third link has a first end fixed to the shaft between the second end of the second link member. The first end is fixed between the second end and what other element?

Claim 7 recites the limitation "the paper sheet" in line 4. There is insufficient antecedent basis for this limitation in the claim. Moreover, it is unclear what is meant in claim 7 by the recited "a pick-up position varying unit to move the pick-up roller to one among at least two pick-up positions which are **pre-set in accordance with the paper characteristics**". (emphasis added).

In claim 8, it is unclear what is meant by the recited "paper of high strength" and "paper of low strength".

In claim 12, it is unclear which paper is referred. Is the recited "the paper" the fed paper or the other paper?

Moreover, it is unclear what is meant in claim 12 by the recited "a pick-up position varying unit to move the pick-up roller to pick-up positions **in accordance with characteristics of the fed paper**". (emphasis added).

Claim 14 recites the limitation "the topmost paper" in line 2. There is insufficient antecedent basis for this limitation in the claim.

In claim 17, it is unclear what is meant by the recited "thick paper" and "thin paper".

In claim 18, it is unclear which paper is referred to. Is the recited "the paper" the fed paper or the other paper?

In claim 19, it is unclear which paper is referred to. Is the recited "the paper" the fed paper or the other paper?

Claim 20 recites the limitation "the driving unit" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim. Also, claim 20 recites the limitation "the rotary member" in line 3. There is insufficient antecedent basis for this limitation in the claim. Moreover, claim 20 recites the limitation "the second end" in line 4. There is insufficient antecedent basis for this limitation in the claim. In addition, claim 20 recites the limitation "the shaft" in line 8. There is insufficient antecedent basis for this limitation in the claim. Also, claim 20 recites the limitation "the second end" in line 10. There is insufficient antecedent basis for this limitation in the claim.

In claim 20, the first end of the third link member is fixed to the shaft between the second end of the second link member and what other element?

Claim 21 recites the limitation "the driving source" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 22 recites the limitation "the driving source" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim.

Claim 23 recites the limitation "the control unit" in line 3. There is insufficient antecedent basis for this limitation in the claim.

In claim 23, it is unclear which paper is referred to. Is the recited "the paper" the fed paper or the other paper?

In claim 27, it is unclear which paper is referred to in line 4. Is the recited "the paper" the fed paper or the other paper?

Moreover, it is unclear what is meant in claim 27 by the recited "a pick-up position varying unit to move the pick-up roller to pick-up positions **in accordance with characteristics of the fed paper**". (emphasis added).

In claim 30, it is unclear what is meant by the recited "thick paper" and "thin paper".

In claim 31, it is unclear which paper is referred to in line 5. Is the recited "the paper" the fed paper or the other paper?

Claim 31 recites the limitation "the driving unit" in line 5. There is insufficient antecedent basis for this limitation in the claim.

In claim 35, it is unclear which paper is referred to in line 2. Is the recited "the paper" the fed paper or the other paper?

Claim 36 recites the limitation "the paper sheet" in line 4. There is nsufficient antecedent basis for this limitation in the claim.

Moreover, it is unclear what is meant in claim 36 by the recited "a pick-up position varying unit to move the pick-up roller to one position among at least two pick-up positions which are pre-set **in accordance with the paper characteristics**". (emphasis added).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 7, 12-16, 18-19, 27-29 and 36, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,382,619 (Gustafson et al.). The Gustafson et al. patent discloses all of the limitations of claims 1, 7, 12-16, 18-19, 27-29 and 36.

Regarding claim 1, Figs. 1-4 show a paper pick-up device of an image forming apparatus, including

a paper feeding cassette (24) including a plurality of sheets of paper, the paper feeding cassette (24) having a friction resistance plate (34), inclined by a predetermined angle to come into contact with a leading end of the paper sheet, to separate the paper sheets one by one;

a pick-up roller (58) to rotate in contact with a topmost paper of the paper feeding cassette (24) to convey a topmost paper toward the friction resistance plate (34);

a pick-up bracket (38) to rotationally support the pick-up roller (58), and having a gear train (including 54a-d) to transmit a rotational driving force to the pick-up roller (58); and

a pick-up position varying unit (72) to move the pick-up roller (58) to one position among at least two pick-up positions (idle position or pick position) which are pre-set in accordance with the paper characteristics. The Gustafson et al. apparatus is designed to work with paper. As such, the pick-up position varying unit inherently operates in accordance with paper characteristics.

Regarding claim 7, Figs. 1-4 show a paper pick-up device of an image forming apparatus, having

a paper feeding cassette (24) including a plurality of sheets of paper, the paper feeding cassette (24) having a friction resistance plate (34), inclined by a predetermined angle to come into contact with a leading end of the paper sheet, to separate the paper sheets one by one;

a pick-up roller (58) to rotate in contact with a topmost paper of the paper feeding cassette (24) to convey the topmost paper toward the friction resistance plate (34);

a pick-up frame (near 92) disposed in the paper feeding cassette (24);

a pick-up bracket (38) movably disposed in the pick-up frame (near 92), on an end of which the pick-up roller (58) is rotatably disposed, and inside of which a gear train (including 54a-d) is provided to transmit a rotational driving force to the pick-up roller (58); and

a pick-up position varying unit (72) to move the pick-up roller to one among at least two pickup positions (idle position and pick position) which are pre-set in accordance with paper characteristics. Again, the Gustafson et al. apparatus is designed to work with paper. As such, the pick-up position varying unit inherently operates in accordance with paper characteristics.

Regarding claim 12, Figs. 1-4 show a paper pick-up device of an image forming apparatus into which paper is fed, including a friction resistance plate (34) inclined by a

predetermined angle to come into contact with a leading end of the fed paper to separate the paper from other paper, including

a pickup roller (58) to convey the paper toward the friction resistance plate (34);

a pickup bracket (38) to rotationally support the pickup roller (58) at a first end of the pickup bracket (38); and

a pickup position varying unit (72) to move the pickup roller (58) to pickup positions in accordance with characteristics of the fed paper. The pickup position varying unit inherently operates in accordance with characteristics of fed paper as explained above. See also column 6, line 59 to column 7, line 24.

Regarding claim 13, Fig. 1 shows a paper feeding cassette (24) in which paper is stacked and from which paper is fed to the image forming apparatus.

Regarding claim 14, Figs. 1 and 4 show that the pickup roller (58) rotates in contact with the topmost paper in the paper feed cassette (24).

Regarding claim 15, column 4, lines 1-15 discloses a pickup driving source to generate a driving force.

Regarding claim 16, Figs. 2-4 show a gear train (including 54a-d) inside the pickup bracket (38) to transmit a rotational driving force to the pickup roller (58) wherein the gear train (including 54a-d) has a rotational driving shaft (40) penetrating through the pickup bracket (38) at a second end of the pickup bracket opposite the first end of the pickup bracket (38);

a pickup gear (48) mounted on the rotational driving shaft (40) to transmit the driving force to the rotational driving shaft (40); and

a plurality of gears (including 54a-d) to transmit the driving force from the rotational driving shaft (40) to the pickup roller (58).

Regarding claim 18, Fig. 4 shows that the pickup position varying unit (72) has a rotary member (50) at the pickup bracket (38) to rotate about an axis to a predetermined angle;

a driving unit (Fig. 4) to drive the rotary member (50) to move between the pickup positions; and

a control unit to detect characteristics of the paper and control the driving unit (Fig. 4) based on the detected characteristics of the paper. See, for example, column 6, line 59 to column 7, line 25.

Regarding claim 19, Fig. 4 shows that the rotary member (50) has the pickup roller (58), on a side of the rotary member (50), to rotate and thereby pickup the paper (i.e., the pickup roller is located on the left-hand side of the rotary member (50) in Fig. 4 and the pickup roller picks up the paper); and

a pickup roller shaft (40), coaxial with the rotary member (50), to transmit rotational force to the pickup roller (58).

Regarding claim 27, Figs. 1-4 show a paper pick-up device of an image forming apparatus into which paper is fed, including a friction resistance plate (34) inclined by a

predetermined angle to come into contact with a leading end of the fed paper to separate the paper from other paper, having

a pickup roller (58) to convey the paper toward the friction resistance plate (34);

a pickup frame (near 92);

a pickup bracket (38), movably disposed in the pickup frame (near 92), at an end of which the pickup roller (58) is rotatably disposed; and

a pickup position varying unit (72) to move the pickup roller (58) to pickup positions in accordance with characteristics of the fed paper.

Regarding claim 28, Fig. 1 shows a paper feeding cassette (24) in which paper is stacked and from which paper is fed to the image forming apparatus.

Regarding claim 29, Fig. 1 shows a cassette mounting portion (near 36), provided in a body of the image forming apparatus, in which the paper feeding cassette (24) is mounted.

Regarding claim 36, Figs. 1-4 show a device, having

a paper feeding cassette (24) including a plurality of sheets of paper, the paper feeding cassette (24) having a friction resistance plate 34), inclined by a predetermined angle to come into contact with a leading end of the paper sheet, to separate the paper sheets one by one;

a pick-up roller (58) to rotate in contact with a topmost paper of the paper feeding cassette (24) to convey a topmost paper toward the friction resistance plate (34);

a pick-up bracket (38) to rotationally support the pick-up roller (58), and having a gear train (including 54a-d) to transmit a rotational driving force to the pick-up roller (58); and

a pick-up position varying unit (72) to move the pick-up roller (58) to one position among at least two pick-up positions (idle position and pick position) which are pre-set in accordance with the paper characteristics.

4. Claims 1-2, 7-9, 12-17, 21, 27-28, 30 and 36, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Publication No. 57-27838 (cited in applicant's January 13, 2005 IDS). This Japanese Publication discloses all of the limitations of claims 1-2, 7-9, 12-17, 21, 27-28, 30 and 36.

Regarding claim 1, Figs. 1-4 show a paper pick-up device of an image forming apparatus, including

a paper feeding cassette (Figs. 1 and 3) including a plurality of sheets of paper, the paper feeding cassette having a friction resistance plate (3), inclined by a predetermined angle to come into contact with a leading end of the paper sheet, to separate the paper sheets one by one;

a pick-up roller (2) to rotate in contact with a topmost paper of the paper feeding cassette (Figs. 1 and 3) to convey a topmost paper toward the friction resistance plate (3);

a pick-up bracket (6) to rotationally support the pick-up roller (2), and having a gear train (including 18, 19) to transmit a rotational driving force to the pick-up roller (2); and

a pick-up position varying unit (including 14-16) to move the pick-up roller (2) to one position among at least two pick-up positions (Fig. 2) which are pre-set in accordance with the paper characteristics. See English Abstract.

Regarding claim 2, Figs. 1-2 show that the at least two pick-up positions include

a first pick-up position where a distance (d1) between the friction resistance plate (3) and the pick-up roller (2) is set to a first distance to allow the pick-up roller to pick-up a paper of strength, and

a second pick-up position where the distance (d2) is set to a second distance, shorter than the first distance (d1), to allow the pick-up roller (2) to pick-up a paper of low strength.

Regarding claim 7, Figs. 1-4 show a paper pick-up device of an image forming apparatus, having

a paper feeding cassette (Figs. 1 and 3) including a plurality of sheets of paper, the paper feeding cassette having a friction resistance plate (3), inclined by a predetermined angle to come into contact with a leading end of the paper sheet, to separate the paper sheets one by one;

a pick-up roller (2) to rotate in contact with a topmost paper of the paper feeding cassette (Figs. 1 and 3) to convey the topmost paper toward the friction resistance plate (3);

a pick-up frame (5) disposed in the paper feeding cassette (Fig. 2);

a pick-up bracket (6) movably disposed in the pick-up frame (5), on an end of which the pick-up roller (2) is rotatably disposed, and inside of which a gear train (including 18 and 19) is provided to transmit a rotational driving force to the pick-up roller (2); and

a pick-up position varying unit (including 14-16) to move the pick-up roller (2) to one among at least two pickup positions (Figs. 1 and 2) which are pre-set in accordance with paper characteristics. See English Abstract.

Regarding claim 8, Figs. 1 and 2 show that the two pick-up positions include

a first pick-up position where a distance (d1) between the friction resistance plate (3) and the pick-up roller (2) is set to a first distance to allow the pick-up roller (2) to pick-up a paper of high strength, and

a second pick-up position where the distance (d2) is set to a second distance to allow the pick-up roller (2) to pick-up a paper of low strength.

Regarding claim 9, Fig. 3 shows that the pick-up position varying unit has

a conveyance frame (14) reciprocally disposed in the pick-up frame (near 5) to support a fixed end of the pick-up bracket (6);

a conveyance unit (15) to linearly reciprocate the conveyance frame (14); and

a control unit to detect the paper characteristics and controlling the conveyance unit based on the detected paper characteristics. See English Abstract. Inherently, there is a control unit to detect and control element 15.

Regarding claim 12, Figs. 1-4 show a paper pick-up device of an image forming apparatus into which paper is fed, including a friction resistance plate (3) inclined by a predetermined angle to come into contact with a leading end of the fed paper to separate the paper from other paper, including

a pickup roller (2) to convey the paper toward the friction resistance plate (3);

a pickup bracket (6) to rotationally support the pickup roller (2) at a first end of the pickup bracket (6); and

a pickup position varying unit (including 14-16) to move the pickup roller (2) to pickup positions in accordance with characteristics of the fed paper. See English Abstract.

Regarding claim 13, Figs. 1 and 3 show a paper feeding cassette in which paper is stacked and from which paper is fed to the image forming apparatus.

Regarding claim 14, Figs. 1-3 show that the pickup roller (2) rotates in contact with the topmost paper in the paper feed cassette.

Regarding claim 15, Figs. 3-4 show a pickup driving source (12) to generate a driving force.

Regarding claim 16, Fig. 4 shows a gear train (including 18 and 19) inside the pickup bracket (6) to transmit a rotational driving force to the pickup roller (2) wherein the gear train (including 18 and 19) has a rotational driving shaft (7) penetrating through the pickup bracket (6) at a second end of the pickup bracket opposite the first end of the pickup bracket (6);

a pickup gear (11) mounted on the rotational driving shaft (7) to transmit the driving force to the rotational driving shaft (7); and

a plurality of gears (including 18 and 19) to transmit the driving force from the rotational driving shaft (7) to the pickup roller (2).

Regarding claim 17, Figs. 1-3 show that the pickup position varying unit (including 14-16) moves the pickup roller (2) to one of at least two positions including a first position at a first distance (d1) from the friction resistance plate (3) to pickup up thick paper, and

a second position at a second distance (d2) from the friction resistance plate (3), the second distance (d2) being shorter than the first distance (d1), to pick up thin paper.

Regarding claim 21, Fig. 3 shows a driving source that is a solenoid (15).

Regarding claim 27, Figs. 1-4 show a paper pick-up device of an image forming apparatus into which paper is fed, including a friction resistance plate (3) inclined by a predetermined angle to come into contact with a leading end of the fed paper to separate the paper from other paper, having

a pickup roller (2) to convey the paper toward the friction resistance plate (3);

a pickup frame (5);

a pickup bracket (6), movably disposed in the pickup frame (5), at an end of which the pickup roller (2) is rotatably disposed; and

a pickup position varying unit (including 14-16) to move the pickup roller (2) to pickup positions in accordance with characteristics of the fed paper. See English Abstract.

Regarding claim 28, Figs. 1 and 3 show a paper feeding cassette in which paper is stacked and from which paper is fed to the image forming apparatus.

Regarding claim 30, Figs. 1-3 show that the pickup position varying unit (including 14-16) moves the pickup roller (2) to one of at least two positions including a first position at a first distance (d1) from the friction resistance plate (3) to pickup up thick paper, and

a second position at a second distance (d2) from the friction resistance plate (3), the second distance (d2) being shorter than the first distance (d1), to pick up thin paper.

Regarding claim 36, Figs. 1-4 show a device, having

a paper feeding cassette (Figs. 1 and 3) including a plurality of sheets of paper, the paper feeding cassette having a friction resistance plate 3), inclined by a predetermined angle to come into contact with a leading end of the paper sheet, to separate the paper sheets one by one;

a pick-up roller (2) to rotate in contact with a topmost paper of the paper feeding cassette to convey a topmost paper toward the friction resistance plate (3);

a pick-up bracket (6) to rotationally support the pick-up roller (2), and having a gear train (including 18 and 19) to transmit a rotational driving force to the pick-up roller (2); and

a pick-up position varying unit (including 14-16) to move the pick-up roller (2) to one position among at least two pick-up positions which are pre-set in accordance with the paper characteristics. See English Abstract.

Conclusion

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald Walsh can be reached on (571) 272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DONALD P. WALSH
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600